

**Abstract**

A computer-implemented method for automatically generating computer code for a software system from a representation of the software system. An architectural description language is used to represent activities and dependencies between activities as separate entities. Dependencies are managed by coordination processes associated with the dependency. Activities and dependencies are connected through ports which encode interfaces between activities and coordination processes. At least one associated computer program is identified for each activity and dependency for implementing the activity or managing the dependency, wherein the representation is defined by activities, dependencies and ports through which activities are connected to dependencies. The associated computer programs are combined to provide the computer code for the software system.